DECISION

THE COMPTROLLER GENERAL
OF THE UNITED STATES
WASHINGTON, D.C. 20548

FILE: B-214356 **DATE:** October 29, 1984

MATTER OF: Laser Photonics, Inc.

DIGEST:

1. The initial determination of whether a proposal is in the competitive range is a matter of agency discretion which will not be disturbed absent a clear showing that the determination lacked a reasonable basis. Moreover, a protester's mere disagreement with the agency's judgment does not meet its burden of proving that the evaluation of proposals and competitive range determination were unreasonable.

2. An agency's judgment that a proposed approach to sophisticated technical hardware presents an unnecessarily high-risk research and development effort will not be questioned where the offeror did not establish the feasibility of the approach within the confines of the proposal.

3. GAO will closely scrutinize evaluations which result in only one firm being included in the competitive range. In cases where only one offeror remains in the competitive range, and it is apparent that solicitation inadequacies contributed to the technical deficiency of proposals, then those affected proposals should be included in the competitive range and discussions should be held.

Laser Photonics, Inc. (LPI) protests the proposed award of a contract to International Laser Systems, Inc. under request for proposals (RFP) No. DAAK20-83-R-0032, issued by the Department of the Army, Electronics Research and Development Command, Fort Monmouth, New Jersey. The procurement is for the acquisition of 25 Laser Target

Markers for use in field operations by the Army's Special Forces. LPI complains that the contracting activity acted improperly in rejecting its initial proposal as technically unacceptable, therefore excluding it from the competitive range.

We believe that the Army reasonably found that LPI's proposal did not and could not, as structured, represent an acceptable approach. We also believe, however, that the agency's invitation to participate, both in the Commerce Business Daily (CBD) announcement and the RFP itself, led LPI into taking the approach it did; the protester asserts, and the record indicates, that the firm would have approached the requirement the way the evaluation shows the Army actually wanted offerors to, had the agency properly represented its desires when soliciting proposals. For that reason, and because the result of the Army's action was to have only one offeror in the competitive range, we believe LPI should be permitted to submit a new proposal. We therefore sustain the protest.

Background

The solicitation was issued on May 11, 1983, seeking technical and cost proposals to develop, fabricate and test 25 Laser Target Markers (LTMs) over a 1-year period. The LTM is a light-weight, miniature, hand-held target marker that will be used by forward observers for area target laser markings (such as for laser guided bombs), and for target transfer to laser tracker-equipped aircraft, out to a range of 3,000 meters. Additionally, the LTM will be able to provide target range information out to 10,000 meters. The complete system being acquired includes the LTM itself, batteries, field case, tripod, lens cleaning kit, and operator's manual.

Prior to its issuance, the solicitation had been listed in the CBD under the category for "Experimental, Developmental, Test and Research Work." The CBD notice stated that the procurement was to be a "twelve month research and development effort," and that proposed designs were to "utilize a number of state-of-the-art technology improvements including advanced laser, receiver, and counting electronics design."

Line item 0001 of the RFP provided that the procurement was:

> "Research and development to design and develop a Compact Laser Demonstrator over a 12 month period starting ___*___ and ending ___*___."

Clause 3.1.1 provided that standard military specification parts, processes, and components were to be used whenever possible, and that commercial parts and materials, subject to all specification provisions, could be used when the size, weight, or cost of standard parts was questionable. Clause 3.2.12 provided that the LTM was to be designed for passive conductive and convective cooling; by Amendment 0003, the Army modified this clause by stating that a "passive cooling system" meant that the LTM was to have no fans or circulating motors. This modification also stated that the "technical approach is at the contractor's discretion." Clauses 3.3.1 and 3.3.5 established that the weight goal for the LTM with batteries was 9 pounds maximum, with a weight goal of 10 pounds or less for the complete system. The Army clarified these clauses by stating in Amendment 0003 that:

> "The weights specified for the LTM and the system weight are goals. . . . If the contractor cannot meet these goals, he should state what his best effort is."

Under the Army's evaluation approach, set forth in section M of the RFP, award was to be based upon the best overall proposal with consideration given to the major factors--Technical, Cost, and Management--in that order. Technical, the most important factor, was of greater weight than the other two combined, with Cost being of greater weight than Management. Under the Technical factor, "Feasibility of Approach" was deemed to be of critical importance, and an unsatisfactory rating in that area would render the proposal unacceptable. Subsection M.14 defined Feasibility of Approach as:

> "Soundness of approach and extent to which successful performance is contingent upon untried and unproven devices and techniques which may require excessive development."

Of the four initial proposals submitted, only that of International Laser Systems, Inc. was evaluated as being technically acceptable and thus included in the competitive range. LPI's proposal was rejected primarily because of an unsatisfactory rating, for a number of reasons, in Feasibility of Approach.

(1) The contracting activity's technical evaluation team objected to LPI's use of a microcomputer to implement the LTM's timing function. The evaluation team felt that this approach, seemingly requiring both hardware and software development to achieve successful performance, would necessitate a significant development effort with attendant technical risk, in contrast to a simple hardware design. Essentially, the microcomputer approach was seen as adding unnecessarily to the LTM's complexity, and was characterized as an "untried and unproven technique."

(2) In a similar vein, the evaluation team discounted LPI's proposed incorporation of an intra-cavity beam expander in the LTM as an unwarrantedly complex technical approach. Although recognizing the use of intra-cavity beam expanders in some other field laser systems, the team felt that use in the LTM would adversely affect the stability of the beam's optical path, since the insertion of such a component introduces the need for an additional mounting component, and increases reliability problems during shock, vibration, and temperature testing.

(3) The team noted that, apart from the resonator, LPI had not built and tested other LTM components. The team concluded that, in the absence of working hardware, the proposed design had to be presented in sufficient detail to enable the government to determine Feasibility of Approach as to satisfactory performance within the anticipated contract period, since the 1-year framework in which to complete delivery allowed very little time for basic design. It was felt that LPI's proposal did not sufficiently detail a number of system elements to a degree that would demonstrate that LPI understood these technical features and was not relying on "untried and unproven devices."

(4) The evaluation team felt that LPI's proposal provided insufficient information to demonstrate that its design with respect to the required passive cooling, which the team considered a high-risk area, was technically feasible, since LPI had presented only a computer model of its approach to indicate its viability, but had furnished no actual experimental data to verify the computer model.

(5) The evaluation team found as unsatisfactory LPI's estimated system weight of 14.8 pounds. Although noting this to be an estimate, the Army felt that LPI's figures were not justified either on the basis of actual measurements or by calculation from reference to similar items. Additionally, it was felt that LPI's proposal lacked any indication of a substantive weight management program to explore specific methods to reduce weight. Therefore, the Army concluded that insufficient information was presented in this area to demonstrate the technical feasibility of LPI's proposed design in "meeting the 10 pound system weight requirement."

LPI formally protested the rejection of its proposal to the contracting officer after having initially requested that it be reevaluated. A reevaluation and further review on the part of the Army confirmed the prior determination that the proposal was technically unacceptable. The contracting officer therefore denied LPI's protest, after which the firm filed a protest with this Office.

Protest and Analysis

LPI disputes the evaluation team's conclusion that its proposed design was too complex regarding the use of a microcomputer and an intra-cavity beam expander, and urges that computer modeling is a realistic and accepted method of demonstrating the feasibility of its passive cooling approach. The firm also contends that its initial anticipated system weight was not a sufficient reason for rejection since, contrary to the Army's characterization, the 10-pound weight maximum was stated as a desired goal, not as a firm requirement.

LPI notes that the language of the solicitation indicated the initial portion of the procurement as a research and development effort, and contends that its proposal therefore should not have been rejected simply because its proposed design might have entailed some degree of technical risk, since such risk must be associated with new and developing technology. LPI urges that the Army evidently misrepresented its apparent desire for proposals based only on previously designed and built hardware by indicating in the CBD notice that it sought "state-of-the-art technology improvements."

Contracting officials enjoy a reasonable degree of discretion in the evaluation of proposals for acceptability, and this Office therefore will not substitute its judgment for that of a procuring agency by making an independent determination unless the agency's action is shown to be arbitrary or in violation of procurement statutes or regulations. See Culp/Wesner/Culp, B-212318, Dec. 23, 1983, 84-1 CPD ¶ 17. Thus, we will not disturb an agency's initial determination of whether a proposal is in the competitive range, that is, whether it is acceptable or susceptible to being made acceptable through discussions, absent clear evidence that the determination lacked a reasonable basis. See Leo Kanner Associates, B-213520, Mar. 13, 1984, 84-1 CPD ¶ 299. In this regard, a protester's mere disagreement with the agency's judgment does not meet its burden of proving that the evaluation of proposals and competitive range determination were unreasonable. SETAC, Inc., 62 Comp. Gen. 577 (1983), 83-2 CPD ¶ 121.

The common theme that runs through all the Army's concerns with LPI's offer is a belief that the technical complexity of the firm's proposed system creates too great a degree of risk in this particular procurement situation, even though the system ultimately might prove workable and even desirable. The time constraints of the procurement are relatively narrow--the Army wants development, testing, and delivery of 25 LTMs within 1 year--and the Army has decided that it simply cannot afford the risk, for purposes of this 1-year requirement, that LPI's offer poses. We do not believe that the Army's position

is unreasonable so that we should substitute our judgment and, in effect, conclude that the agency should accept LPI's approach.

For example, LPI contends that the use of a microcomputer to implement the laser's timing function is not an infeasible approach, and that its use will reduce the parts count. LPI believes that by reducing the parts count, system reliability will be increased and repair time and spare parts inventory will be minimized. Although the Army indeed recognized that the microcomputer approach "may be superior to the more traditional approach (i.e., a hardware design)," it felt that the microcomputer use in the LTM represented an untried and unproven technique, as evidenced by the fact that no target markers in current use feature a microcomputer. The Army especially felt that LPI had not yet developed a sufficient software base for its proposed microcomputer to lessen the degree of technical effort needed to establish system reliability. Because of the time constraints involved, it was the Army's position that the development effort should be concentrated on high risk areas such as passive cooling.

As stated above, the RFP informed offerors that Feasibility of Approach would be evaluated in relation to the extent to which the proposed system relied upon untried and unproven components, and advised that standard military specification parts and processes should be used whenever possible. Although we do not believe that microcomputers per se should be regarded as unproven technology, given their widespread use in many other applications, we cannot agree with LPI that its proposal was unfairly evaluated on this item. The firm's disagreement with the Army's position as to technical risk associated with the first-time use of a microcomputer in the LTM does not establish that the concern was unjustified. SETAC, Inc., supra.

Our conclusion also applies to LPI's approach to passive cooling. The Army regards this as a high-risk area necessitating a considerable degree of technical development, whereas LPI has characterized it as an area of only low risk, and treated it as such in its proposal, albeit in some detail. We generally will not question an

agency's judgment that a proposed approach to sophisticated technical hardware presents an unnecessarily high risk unless the offeror clearly establishes the feasibility of the approach within the confines of the proposal. See Ionics Inc., B-211180, Mar. 13, 1984, 84-1 CPD ¶ 290. While computer modeling may well be, as LPI argues, an effective research and development tool, we cannot find as being unreasonable the Army's concern with the firm's approach to addressing this critical area of the agency's requirements.

The Army's concern with the weight of LPI's proposed system did not relate so much to technical risk as to simple noncompliance. LPI's objection to the Army's reliance, in rejecting LPI's offer of a 14.8 pound system, on the RFP's stated 10-pound desired weight for the system, is based on the firm's doubt that 10 pounds really is feasible. (The single competitive-range offeror in fact specified a 10-pound system.) We have no basis, however, to question that the lesser weight is imperative given the use of the LTM by the individual soldier, and there is nothing in the record to establish that the 10 pound weight maximum is unreasonable. Although we note that the RFP only stated 10 pounds to be a desired goal rather than an absolute requirement, offerors were advised that if they could not meet the weight limit, they were to state what their best effort would be. We agree with the Army that LPI's proposal lacked any indication of a substantive weight management program, only stating in this regard that:

> "a weight management program will be established based upon the proposed weight goal budget. Weekly review will be held to insure that all weight goals are met or exceeded."

Clearly, such a statement in the proposal does not establish any viable, specific approach to the problem, and a mere blanket offer of compliance is not a substitute for a detailed technical analysis of how the agency's needs will be met. See Kings Point Manufacturing Co., Inc., B-212782, Mar. 13, 1984, 84-1 CPD ¶ 291.

In sum, LPI presented the Army a proposal that in some areas simply was too risky for what the agency envisioned,[1] and in another (system weight) demonstrated little if any possibility of meeting the agency's needs. We cannot conclude that the Army, acting on those concerns, was unreasonable in rejecting LPI's initial proposal.

Nevertheless, we are concerned with the fact that the result of the Army's action was to establish a competitive range of only one offeror. Since it is a basic principle of government procurement to maximize competition for federal contracts to the greatest extent possible, we have stated that we will closely scrutinize any agency's evaluation that results in only one offeror being included in the competitive range. See Falcon Systems, Inc., B-213661, June 22, 1984, 84-1 CPD ¶ 658.

Here, LPI was seemingly rejected for proposing a design which incorporated advanced technological features, despite the fact that the CBD notice and the solicitation itself indicated that the government desired a "research and development" effort utilizing "state-of-the-art technology improvements." For example, we think it was entirely logical for LPI to assume that the use of a microcomputer to implement the LTM's timing function would represent such state-of-the-art technology. It is evident that LPI, and perhaps other offerors, inferred

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[1] We have not discussed the parties' disagreement about the intra-cavity beam expander, since we believe the other matters are adequate to support the Army's rejection of LPI's proposal. We note, however, the Army's position that while use of an intra-cavity beam expander is not necessarily a new technique, evidenced by the fact (as LPI points out) that it is used in other military field target marker devices, its use will complicate the design so as to degrade the stability of the LTM's optical path. LPI argues that this is not the case since the addition of any optical component beyond the basic laser rod and end mirrors will complicate the design and may affect stability if not properly mounted.

from the CBD notice and the solicitation's language that new design concepts for the LTM were being sought, which we believe was a fair and reasonable inference resulting, at least in LPI's case, in the offer of a complex design in an effort to satisfy the Army's apparent desire for a technically sophisticated target marker system. Moreover, as already indicated, it is our understanding that LPI could have readily responded to the technological effort the Army truly desired if that desire had in fact been known. In that sense, although we cannot conclude that the Army's evaluation was unreasonable as to what it actually wanted, that is, relatively uncomplicated and technically low-risk LTMs, we believe it was unfair to hold offerors to a standard that had not been clearly expressed in the solicitation. Cf. Software Associates, Ltd., B-213878, Apr. 3, 1984, 84-1 CPD ¶ 378.

In cases where only one offeror remains in the competitive range, we have held that if inadequacies of the solicitation contributed to the technical deficiency of proposals, then those affected proposals should be included in the competitive range and discussions should be held. See Falcon Systems, Inc., supra; Comten-Comress, B-183379, June 30, 1975, 75-1 CPD ¶ 400. We have little doubt here that offerors may have been misled by the Army's call for advanced technology. Therefore, we believe that negotiations should be opened with LPI and the two other offerors found to be technically unacceptable so that they may have an opportunity to submit revised proposals in conformity with the Army's now obvious desire for tried and proven components and techniques.

We sustain the protest on the ground that the Army essentially misrepresented its requirements. Accordingly, we are recommending to the Secretary of the Army by separate letter that the contracting activity open negotiations consistent with our conclusion.

for Comptroller General
of the United States